IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A bone fixation assembly comprising:

a unitary coupling element having a first bore having an axis, the first bore adapted to receive a head portion of a fixation element and to permit axial, sliding movement of the coupling element relative to the fixation element, the coupling element having a second bore adapted to receive a spinal rod;

a first locking element adapted to secure the head portion of the fixation element in the first bore at any point along the length of the head portion of the fixation element, wherein the first locking element comprises a ~~compressive~~ compressible ball ring; and

a second locking element adapted to secure the spinal rod in the second bore.

2. (currently amended) The bone fixation assembly of claim 1, wherein the first locking element further comprises a locking nut.

3. (currently amended) The bone fixation assembly of claim ~~2~~1, wherein the ~~compressive~~ compressible ball ring is at least partially split.

4. (currently amended) The bone fixation assembly of claim 1, wherein said second bore has an axis transverse to the axis of the first bore.

5. (currently amended) The bone fixation assembly of claim 1, wherein said second locking element is connected to said coupling element and cannot be removed from said coupling element after connection therewith.

6. (currently amended) The bone fixation assembly of claim 5, wherein second locking element includes a flared lip that cooperates with a shoulder associated with the coupling element to prevent inadvertent removal of the second locking element.

7. (currently amended) The bone fixation assembly of claim 1, wherein the first locking element is connected to said coupling element and cannot be removed from said coupling element after connection therewith.

8. (currently amended) The bone fixation assembly of claim ~~1~~2, wherein the locking nut contains external male threads that engage female threads formed in the first bore.

9. (currently amended) The bone fixation assembly of claim 8, wherein the ~~compressive~~ compressible ball ring is seated within the first bore and at least a portion of the locking nut circumferentially surrounds a portion of the ball ring.

10. (currently amended) The bone fixation assembly of claim 9, wherein engagement of the male threads of the locking nut with the female threads in the first bore exerts radial force on the ~~compressive~~ compressible ball ring to secure the head of the fixation element in the first bore.

11. (currently amended) The bone fixation assembly of claim 10, wherein the locking nut is in a locked position, and the ~~compressive~~ compressible ball ring is in contact with the coupling member and the locking nut.

12. (currently amended) The bone fixation assembly of claim 11, wherein the second locking element includes a set screw.

13. (currently amended) The bone fixation assembly of claim 12, wherein the set screw is permanently seated in the coupling member.

14. (currently amended) The bone fixation assembly of claim 13, wherein the locking nut and ~~compressive~~ compressible ball ring are permanently seated in the first bore.

15. (currently amended) The bone fixation assembly of claim 13, wherein the locking nut cannot be removed from said coupling element after connection therewith.

16. (currently amended) The bone fixation assembly of claim 15, wherein a portion of the first bore is tapered and the locking nut includes a tapered opening to permit polyaxial motion between the fixation element and the connector.

17. (currently amended) The bone fixation assembly of claim 16, wherein the taper in the first bore and the taper in the locking nut extend in opposite directions.

18. (currently amended) The bone fixation assembly of claim 17, wherein the fixation element includes a screw.

19. (currently amended) A bone fixation assembly comprising:

a unitary coupling element having a first bore adapted to slidingly receive a head portion of a fixation element, and a second bore adapted to receive a spinal rod;

a first locking element pre-assembled with the coupling ~~member~~ element and adapted to secure the head portion of the fixation element in the first bore at any point along the length of the head portion of the fixation element, the first locking element including a ~~compressive~~ compressible ball ring; and

a second locking element pre-assembled with the coupling ~~member~~ element and adapted to secure the spinal rod in the second bore.

20. (original) The bone fixation assembly of claim 19, wherein the first bore permits axial movement of the coupling element relative to the fixation element.

21. (original) The bone fixation assembly of claim 20, wherein the first bore permits polyaxial movement of the coupling element relative to the fixation element.

22. (original) The bone fixation assembly of claim 21, wherein the first bore has an axis, and the second bore has an axis transverse to the first bore.

23. (currently amended) The bone fixation assembly of claim 19, wherein the ~~compressive~~ compressible ball ring is seated in the first bore and cooperates with a locking nut threaded in the first bore.

24. (currently amended) The bone fixation assembly of claim 20, wherein the locking nut is adapted to exert radial force on the ball ring.

25. (currently amended) A bone fixation assembly comprising:

a unitary coupling element having a first bore adapted to slidingly receive a head portion of a fixation element and to permit axial movement of the coupling element relative to the fixation element; and

a locking element including a ball ring and a locking nut associated with the head portion of the fixation element to exert a radial force on the ball ring such that the ball ring exerts a compressive force on the head portion of the fixation element to secure the head portion of the ~~screw~~fixation element in the coupling element at any point along the length of the head of the ~~screw~~fixation element.

26. (previously presented) A bone fixation assembly comprising:

a unitary coupling element having a first bore adapted to slidingly receive a head portion of a fixation element and to permit axial movement of the coupling element relative to the fixation element;

a compressible ball ring seated in the first bore adapted to secure the head of the fixation element to the coupling element when the ball ring is compressed at any point along the length of the head of the fixation element; and

means for exerting compressive radial force on the ball ring.

27. (currently amended) The bone fixation assembly of claim 26, wherein the means for exerting compressive radial force includes a locking nut.

28. (currently amended) The bone fixation assembly of claim 27, wherein the locking nut contains external male threads adapted to engage internal female threads in the first bore.

29. (currently amended) A bone fixation assembly comprising:

a unitary coupling element having a first bore adapted to slidingly receive a head portion of a fixation element and to permit axial movement of the coupling element relative to the fixation element; and

a first locking element including a locking nut that engages the first bore and a tapered opening adapted to allow polyaxial motion of the head portion of thea fixation element inserted therethrough, the first locking mechanism further including a ~~compressive~~ compressible ball ring for locking the head portion of the fixation element at any position along its length.

30. (currently amended) The bone fixation assembly of claim 29, wherein the locking nut cooperates with the ~~compressive~~ compressible ball ring to exert force on the head of the fixation element to lock the fixation element with respect to the coupling element.

31. (currently amended) A bone fixation assembly comprising:

a fixation element having a substantially cylindrical, smooth head portion;

a unitary coupling element having a first bore adapted to slidingly receive the head portion of the fixation element and to permit axial, sliding movement of the coupling element relative to the fixation element, the coupling element having a second bore adapted to receive a spinal rod;

a first locking element including an externally threaded locking nut adapted to cooperate with threads in the first bore and exert radial compressive force on a ~~compressive~~ compressible ball ring slidably mounted on the head portion of the fixation element pre-seated in the first bore to secure the head portion of the fixation element in the first bore at any point along the length of the head portion of the fixation element, the locking nut permitting polyaxial motion of the fixation element; and

a second locking element pre-assembled with the coupling member and adapted to secure the spinal rod in the second bore.

32-38. (canceled)

39. (currently amended) The bone fixation assembly of claim 1, further comprising a fixation element having a head portion, wherein the head portion of the fixation element is inserted in the first bore.

40. (currently amended) The bone fixation assembly of claim 19, further comprising a fixation element having a head

portion, wherein the head portion of the fixation element is inserted in the first bore.

41. (currently amended) The bone fixation assembly of claim 25, further comprising a fixation element having a head portion, wherein the head portion of the fixation element is inserted in the first bore.

42. (currently amended) The bone fixation assembly of claim 26, further comprising a fixation element having a head portion, wherein the head portion of the fixation element is inserted in the first bore.

43. (currently amended) The bone fixation assembly of claim 19, wherein said ~~compressive~~ compressible ball ring is at least partially split.

44. (previously presented) The bone fixation assembly of claim 25, wherein said ball ring is at least partially split.

45. (previously presented) The bone fixation assembly of claim 26, wherein the compressible ball ring is at least partially split.

46. (currently amended) The bone fixation assembly of claim 29, wherein the ~~compressive~~ compressible ball ring is at least partially split.

47. (currently amended) The bone fixation assembly of claim 31, wherein the ~~compressive~~ compressible ball ring is at least partially split.